

A New *Necydalis* Species (Coleoptera, Cerambycidae) Discovered on Mt. Phang Si Pang of Northwestern Vietnam

Tatsuya NIISATO

Bioindicator Co., Ltd., Yarai-chô 126, Shinjuku-ku, Tokyo, 162–0805 Japan

and

Nobuo OHBAYASHI

Entomological Laboratory, College of Agriculture, Ehime University,
3–5–7, Tarumi, Matsuyama, 790–8566 Japan

Abstract A new necydaline species belonging to the group of *N. nanshanensis* is described from the alpine zone of Mt. Phang Si Pang in northwestern Vietnam. It has a closer relationship in general features to *N. fujianensis* from South China and *N. nanshanensis* from Taiwan than to *N. shinborii* from northern Vietnam.

The necydaline fauna of northern Vietnam has been rapidly clarified by Japanese entomologists since 1996 (TAKAKUWA & NIISATO, 1996; NIISATO, 1998a–c). Total seven congeners including four endemic species have so far been recorded only from Mt. Tam Dao of Vinh Phu Province. It has been expected that additional *Necydalis* species will be found in other areas of Vietnam. Recently, we were able to examine a peculiar necydaline species doubtless belonging to the group of *N. nanshanensis*, which was collected from the alpine zone of Mt. Phang Si Pang in northwestern Vietnam. After a comparative examination of all the known members of the species-group, it becomes evident that the species in question is not only a new member of the group but also has a closer relationship to *N. fujianensis* from South China and *N. nanshanensis* from Taiwan than to *N. shinborii* from northern Vietnam. We are therefore going to describe it as a new species in the following lines. The abbreviations used in the description are explained in other collaborate paper by the senior author in the present volume (p. 290).

We are very grateful to Dr. Shun-Ichi UÉNO of the National Science Museum (Nat. Hist.), Tokyo, for his constant guidance and kindly reading through the original manuscript of this paper. Our special thanks are also due to Mr. Hiroshi WAKAI of Toyonaka for his kind offer of the invaluable specimen, and to Dr. Masatoshi TAKAKUWA of the Kanagawa Prefectural Museum of Natural History, Odawara, for his useful suggestion for our study.

Necydalis (Necydalis) alpinicola NIISATO et N. OHBAYASHI, sp. nov.

(Figs. 1–2)

Belonging to the group of *N. nanshanensis*, bearing a closer relationship to *N. fujianensis* NIISATO et PU from South China and *N. nanshanensis* KUSAMA from Taiwan than to *N. shinborii* TAKAKUWA et NIISATO from northern Vietnam, and agreeing with the former two species in the short and almost parallel-sided elytra which are dehiscent in more than apical 2/5 and without sutural angles, and the distinctly raised posterior half of pronotum. Discriminated from such closest species by the absence of golden yellow pubescence on pronotum and elytra, and the apparently dilated antennal segments 5–10.

M a l e. Colour black in head and thoraces, brown in abdomen and appendages, moderately shiny; head black, brown in apical quadrate part of clypeus, mouthparts except for apices and external margins of mandibles; antennae brown in basal four segments, yellowish brown in the remainders; pronotum, scutellum, and meso- and metathoraces black; elytra unicolored brown, more or less shagreened; hind wings translucent brown; abdomen brown, with ventrite 1 largely black except for margins; legs brown, yellow in hind tarsus, infuscate on dorsal sides of fore tibia and tarsus and mid claw, basal half of hind tibia more or less reddish.

Head relatively small, slightly narrower than the maximum width of pronotum, closely and somewhat deeply punctured, sparsely clothed with golden yellow pubescence though rather dense in tempora, HW/PA 1.21, HW/PW 0.92; frons quadrate, with sides parallel and not marginate, gently raised, with a median longitudinal furrow relatively deep and running from apical fourth to vertex, FL/FB 0.88, FB/FA 1.00; clypeus with apical lobe transverse trapezoidal, with truncate margin, moderately raised and punctured in basal 2/3, basal lobe semicircular, punctured as on apical one, with very deep fronto-clypeal suture; mandibles moderate in length, not so stout, rather acute at apices; genae rather short, a half the depth of lower eye-lobes, slightly convergent in frontal view; occiput gently raised; eyes moderate, weakly prominent. Antennae relatively long in the group of *N. nanshanensis*, barely reaching apical third of abdominal ventrite 4, rather stout, distinctly flattened and dilated in segments 5–10, clothed with dense brown pubescence on basal four segments, and pale yellow minute one on the remainders; scape short, gently broadened apicad, a little shorter than segment 3, provided with small punctures, segments 3 and 4 hardly thickened at apices, punctured as in scape, the latter segment 3/4 the length of the former, segment 7 the longest though only slightly longer than the preceding one, terminal segment gently arcuate, bluntly pointed at the extremity.

Pronotum moderate in length and width, distinctly contracted to apex, just of equal length to the maximum width across the lateral swellings at middle, distinctly sinuate at sides, strongly convex towards base, PL/PA 0.76, PL/PW 1.00, PB/PA 1.26, PW/EW 0.96, PL/EL 1.02; apex truncate and not marginate near middle, nearly 4/5 the width of base; base also transverse near middle, narrowly marginate, with deep trans-



Fig. 1. *Necydalis (Necydalis) alpinicola* NIISATO
et N. Ohbayashi, sp. nov., holotype ♂.

verse furrow along margin; sides roundly arcuate in basal fifth, with arcuate swellings at a level between apical and basal 3/10, strongly constricted before and behind the swellings, moderately arcuate in basal fifth; disc strongly convex in basal 3/10 though transversely depressed along base, the convex part forming a pair of callosities which intervenes the vestigial median line, and also strongly depressed along apical margin and transverse part of apical fifth; surface densely deeply punctured, the punctuation becoming sparser on the callosities and apical fifth, somewhat rugosely so in basal fifth, rather sparsely clothed with golden yellow hairs except for almost glabrous callosities. Scutellum trapeziform, slightly concave at apex, shagreened, clothed with golden yellow pubescence.

Elytra fairly short, almost quadrate, slightly wider than long, equal in length to

pronotum, slightly exceeding apical fifth of metepisterna, widest at humeri, wholly exposing the sides of meso- and metathoraces, EL/EW 0.94; sides rather distinctly projected at humeri, gently convergent to apices which are roundly truncate and without inner angles; suture completely conjoined in basal half, then weakly arcuately dehiscent to apices; disc convex and uneven, longitudinally depressed along suture except for the raised areas in apical fourth, arcuately so just before the raised areas, with external margins rather widely depressed, thinly haired in most parts, though partly clothed with brown pubescence on apical fifth of disc and apical third of sides. Hind wings reaching base of abdominal tergite 6.

Meso- and metathoraces strongly voluminous, closely deeply punctured, clothed with golden yellow recumbent hairs, partly with dense same-colored pubescence on mesepimeron, metepimeron, apical part of metepisternum, and along anterior margin of hind coxae. Abdomen remarkably elongate and slender, smooth, clothed with pale yellow pubescence; ventrites 1 and 2 parallel-sided and slightly thickened apicad, the former more than 1.3 times as long as the latter, ventrite 3 similar in shape to the preceding though slightly shorter and more distinctly thickened apicad, ventrite 4 the widest, as long as the preceding, with sides almost parallel in basal 2/7, then arcuately dilated to just before apex which is 1.5 times as wide as base, ventrite 5 with sides weakly and straightly dilated to apical 3/10, then narrowed to apical margin which is widely triangularly emarginate, with disc triangularly impressed at a level between basal 2/5 and apical 3/10, then suddenly concave towards emarginate apical margin. Tergite 8 long, rounded at apex with small triangular concavity.

Legs long and slender, exceeding abdominal apex at base of hind tarsal segment 2; hind femur weakly clavate in apical third; hind tibia gently arcuate in apical half; hind tarsus moderate in length, with first segment weakly thickened apicad, 2.0 times as long as the following two segments combined.

Male genital organ moderately sclerotized, a little longer than the length of ventrite 5. Median lobe slender and slightly convex, moderately arcuate in profile, with apical lobe in dorsal view straightly dilated apicad and exposing narrowly pointed ventral plate; dorsal plate with apex narrowly truncate and strongly depressed; ventral plate prolongedly pointed and slightly thickened at the extremity. Tegmen 1.25 times as long as median lobe, slender; paramere a little less than a half the length of tegmen, parallel-sided, each lobe hardly dilated to apex which is rounded and densely clothed with setae.

Body length 26.5 mm.

Female. Unknown.

Holotype ♂, Mt. Phang Si Pang, 2,700 m in alt. (one of the peaks), Lai Chau Province of northern Vietnam, V-2003, local collector leg. Deposited in the collection of the Entomological Laboratory, Ehime University, Matsuyama. The holotype is partly broken at the left side of pronotum and missing the left mid leg.

Distribution. N. Vietnam.

Notes. According to the recent knowledge (NIISATO, 1998 c; NIISATO & PU,

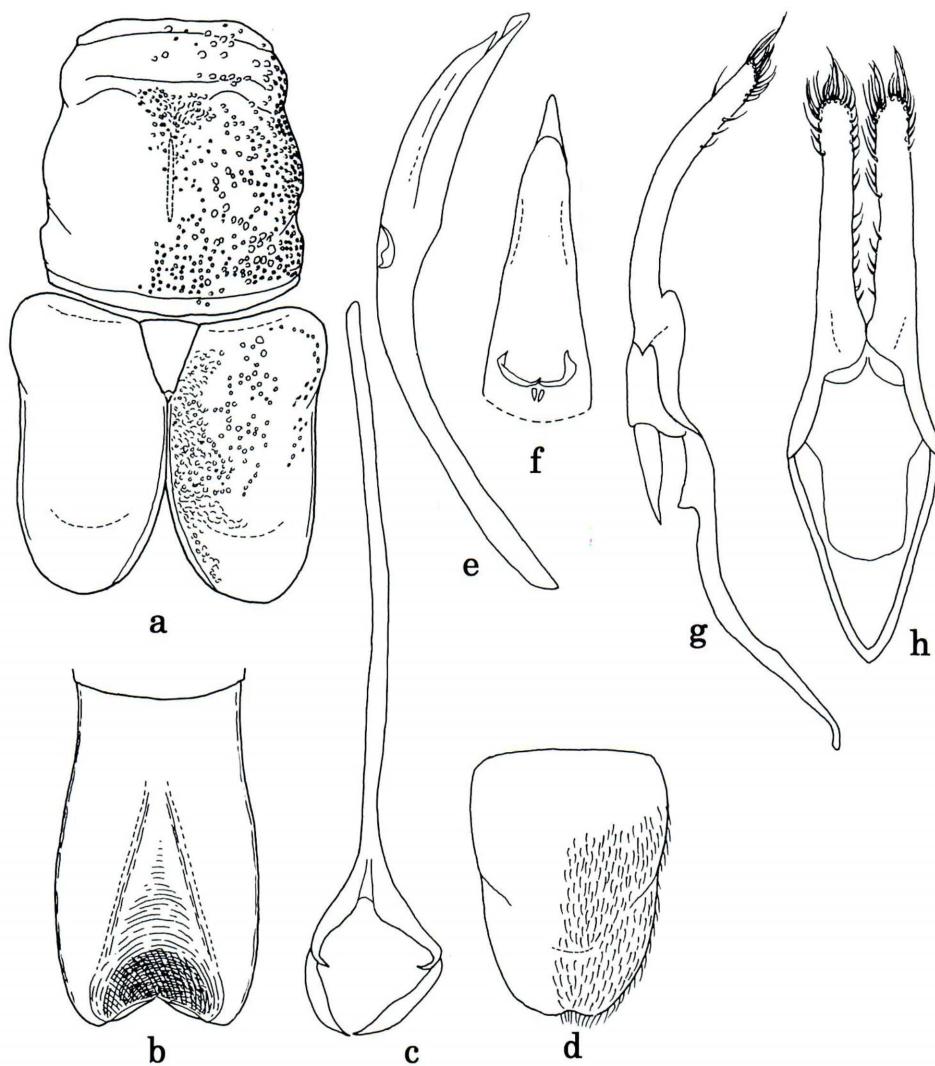


Fig. 2. *Necydalis (Necydalis) alpinicola* Niisato et N. OHBAYASHI, sp. nov. — a, Pronotum and elytra; b, last ventrite in ventral view, showing concavity; c, vestigial sternite 8 and spiracle gastrale; d, tergite 8 in dorsal view; e, median lobe in lateral view; f, ditto, apical part in dorsal view; g, tegmen in lateral view; h, ditto in dorsal view.

1998), five members of the group of *Necydalis nanshanensis* have so far been recorded; viz., *N. yakushimaensis* KUSAMA from Yakushima Island of the northern Ryukyus, *N. nanshanensis* KUSAMA from Taiwan, *N. fujianensis* NIISATO et PU from South China, *N. shinborii* TAKAKUWA et NIISATO and *N. katsuraorum* NIISATO, both from northern Vietnam. These members except *N. katsuraorum* are considered to have been derived from the same ancestor, and their present distribution is allopatric in the

wide area between eastern Indochina and the northern Ryukyus. *Necydalis katsurorum* is no doubt an isolated species in view of its peculiar habitus, and sympatric with *N. shinborii* in northern Vietnam. However, such an opinion of ours may be slightly changed by the present discovery of *N. alpinicola* sp. nov. from Mt. Phang Si Pang of northwestern Vietnam. As was noticed in the introduction and description, this new species has a closer relationship in the structure of pronotum and elytra to *N. fujianensis* and *N. nanshanensis* (and/or *N. yakushimensis*) than to almost sympatric *N. shinborii* from northern Vietnam. It is most probable that *N. shinborii* may be a species rather isolated within the species-group, whereas three or four other species, *N. alpinicola* sp. nov., *N. fujianensis* and *N. nanshanensis* (and/or *N. yakushimensis*) form a species-complex within the group. According to personal communication from Dr. M. TAKAKUWA, *N. yakushimensis* should be considered to be a local race of *N. nanshanensis*.

要 約

新里達也・大林延夫：ベトナム北西部のファンシーパン山から見つかったホソコバネカミキリ属の1新種。—— 北ベトナムのホソコバネカミキリ属は1996年以降に急速にその実態が解明され、これまでのところ4固有種を含む7種が記録されている。しかし、そのいずれもがビンフー州のタムダオ山からもたらされたもので、ベトナムの他地域からの公式記録は知られていなかった。ようやく2003年の春に、ベトナム北西部のライチャウ州のファンシーパン山において、ナンシャンホソコバネカミキリ種群の新たな種が見つかった。興味深いことに、この新種は、近隣地域に分布する同種群のシンボリホソコバネカミキリよりはむしろ、中国南部のフッケンホソコバネカミキリおよび台湾のナンシャンホソコバネカミキリに、形態的にみて近縁である。たとえば、前胸背板の輪郭や後方に高まる背面隆起、先端1/2で開裂する縫合線と完全に丸められる短い上翅などの形質は、中国南部および台湾の種に共通である。このような特徴から判断すると、本新種はナンシャンホソコバネらと直系にあり、シンボリホソコバネはむしろ同種群のなかで異なる系列のではないかと推定される。この画期的な新種は、ファンシーパン山の標高2,700mのピークで採集されたという。そこで、種名は採集地に因み、*Necydalis alpinicola*（高山に住むもの）と命名した。

References

NIISATO, T., 1998 a. An addition to the genus *Necydalis* (Coleoptera, Cerambycidae) from northern Vietnam. *Elytra, Tokyo*, **26**: 201–205.
 ——— 1998 b. Cerambycid beetles of the genus *Necydalis* (Coleoptera, Cerambycidae) from northern Vietnam I. *Gekkan-Mushi, Tokyo*, (331): 2–7. (In Japanese, with English description.)
 ——— 1998 c. Ditto, II. *Ibid.*, (332): 16–21. (In Japanese, with English summary.)
 ——— & F.-J. PU, 1998. A new species of the group of *Necydalis nanshanensis* (Coleoptera, Cerambycidae) discovered in Continental China. *Elytra, Tokyo*, **26**: 445–449.
 TAKAKUWA, M., & T. NIISATO, 1996. The genus *Necydalis* (Coleoptera, Cerambycidae) from northern Vietnam, with description of two new taxa. *Bull. Kanagawa pref. Mus. Nat. Hist.*, (56): 77–86.
 * Other references are given in NIISATO (1998 c).